

REMARKS

Claims 10, 21, 22, 24-26, 28 and 46-69 are pending in the application, with claims 10, 21, 25, 46, 50, 54, 58, 62 and 66 being independent. Claims 62-69 have been added.

Applicant acknowledges with appreciation the Examiner's allowance of claims 10, 21, 22, 24-26, 28 and 46-53. The reasons for allowance note that the prior art does not disclose an ion doping apparatus that uses coils having diameters that monotonically *increase* as the flow of ions extends downstream. However, the claims actually recite that the diameters *decrease* as the flow of ions extends downstream. Applicant assumes that this difference was merely a typographical error in the reasons for allowance.

Independent claims 54 and 58, and their dependent claims 57 and 61, have been rejected as being anticipated by Yoshida. Applicant requests reconsideration and withdrawal of this rejection because Yoshida does not describe or suggest means for applying a magnetic field and an electric field to an ion current to separate the ion current into at least two ion currents on a mass basis. After reviewing Yoshida, applicant can find no reference to such a means. In Fig. 5, Yoshida illustrates a charged particle beam 420 that is discussed at col. 9, lines 17-30. However, Yoshida nowhere indicates that this beam may be divided into at least two ion currents on a mass basis.

The action indicates that Yoshida describes the recited means for applying at col. 4, lines 11-18. However, that passage merely describes an alternative ion source, and does not describe a means for separating an ion current into at least two ion currents on a mass basis.

For the reasons noted above applicant requests reconsideration and withdrawal of the rejection of claims 54, 57, 58 and 61.

Dependent claims 55, 56, 59 and 60 have been rejected as being obvious over Yoshida in view of Yamazaki. Applicant requests reconsideration and withdrawal of this rejection because Yamazaki does not remedy the failure of Yoshida to describe or suggest the subject matter of the independent claims.

Each of new independent claims 62 and 69 recites a slit provided between the means for applying the first magnetic field and the means for applying the second magnetic field. Such a

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slit finds support at reference numeral 36 in Fig. 5A. Applicant believes that these claims are allowable over Yoshida and Yamazaki at least as a result of their recitation of a first magnetic field that has the same magnitude as the second magnetic field and an opposite direction to the second magnetic field.

Applicant submits that all claims are in condition for allowance.

Enclosed is a \$110 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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